

## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

## REGION 6 1445 ROSS AVENUE, SUITE 1200 DALLAS TX 75202-2733

CERTIFIED MAIL: RETURN RECEIPT REQUESTED (7014 2120 0003 8222 8527)

Mr. Chris Linendoll, E.I.T., Section Manager Wastewater Permitting Section (MC-148) Texas Commission on Environmental Quality Post Office Box 13087 Austin, Texas 78711-3087

Re:

Withdrawal of Interim Objection

TPDES Permit No. TX0136778 (WQ0014488003)

City of Dripping Springs

Dear Mr. Linendoll:

Thank you for responding to the concerns raised in EPA's December 1, 2016, Interim Objection letter regarding the above referenced facility.

Item by item comments and resolutions, are included below for each of the antidegradation issues EPA had with this draft permit.

Issue 1: According to 40 CFR §131.12(a)(2), high quality waters "must be maintained and protected unless the State finds, after full satisfaction of the intergovernmental coordination and public participation provision of the State's continuing planning process, that allowing lower water quality is necessary to accommodate important economic or social development in the area in which the waters are located."

**Resolution**: Limits were developed during TCEQs technical review of the permit application. During this review, dissolved oxygen (DO) modelling, dissolved solids (TDS) screening, and a nutrient evaluation was conducted. The limits for all constituents in the permit were developed based on these evaluations and are considerably more stringent than most municipal permits, especially Total Phosphorus. It should also be noted that a limit for Total Nitrogen and dechlorination were added to this draft permit based on public comments. Additionally, a wastewater treatment facility (WWTF) will contribute significantly fewer pollutants, nutrients, etc. to Onion Creek than individual septic systems, which are currently being used by existing homes in the area.

Issue 2: According to 30 TAC §307.5(b)(2), "[n]o activities subject to regulatory action that would cause degradation of waters that exceed fishable/swimmable quality are allowed unless it can be shown to the commission's satisfaction that the lowering of water quality is necessary for important economic or social development."

**Resolution**: It does not appear that discharge from the City of Dripping Springs WWTF will degrade the receiving waters to a point that exceeds fishable/swimmable quality. As stated above (Issue 1), limits were developed during TCEQs technical review of the permit application. It is expected, based on TCEQ review, screening, and modelling that any changes to the receiving water will be de minimis (i.e., less than noticeable).

Issue 3: TCEQ Notice of Application and Preliminary Decision states that "[a] Tier 2 review has preliminarily determined that no significant degradation of water quality is expected in Onion Creek, which has been identified as having high aquatic life uses." EPA recognizes that some states, including Texas, have chosen to target their antidegradation efforts by defining a significance threshold above which the effects on water quality require a finding of necessity and social and economic importance under 40 CFR §131.12(a)(2). However, EPA cannot discern from the information provided what factors TCEQ considered in its determination of no significant degradation and whether the state's analysis complied with TCEQ's antidegradation policy and implementation procedures for Tier 2 review. Please provide additional information regarding the state's Tier 2 analysis in regard to the City of Dripping Springs discharge, including whether the state's analysis was subject to public review and comment.

**Resolution**: Per TCEQ's response, dated June 1, 2017, to EPA's Interim Objection letter, dated December 1, 2016, and as stated in EPA Findings for Issue 1 (above), the preliminary antidegradation review included technical reviews that include DO modelling, TDS screening, and nutrient evaluation. Based on these, limits are set that ensure no significant degradation of water quality will occur and existing uses will be maintained in Onion Creek. With the lower than normal limits provided in this draft permit it appears that this facility will not significantly impact Onion Creek negatively. Additionally, this facility will allow for greater oversight of pollutants, nutrients, etc., entering into Onion Creek than individual septic systems.

**Issue 4**: There is concern that the effluent limits proposed in the draft permit would contribute more than 450 pounds of phosphorus (P) per year in a phosphorus limited stream with a currently estimated annual load of approximately 1 pound of P and the proposed increase of Total Nitrogen (N) would be even more significant. Additional information is needed from the permittee/TCEQ to show that these increases in Total P and Total N would not negatively impact the receiving waters.

**Resolution**: TCEQ placed very low limits for Total Phosphorus (0.15 mg/L) and Total Nitrogen (6.0 mg/L) in the draft permit due to public comment. They additionally included dechlorination which is not required for minor permits. Due to these limitations and requirements, EPA believes the impact from these nutrients will be minimal.

Issue 5: According to 30 TAC §307.4(e), "Nutrients from permitted discharges or other controllable sources must not cause excessive growth of aquatic vegetation that impairs an existing, designated, presumed, or attainable use." Onion Creek is presumed high aquatic life use and primary contact recreation and is used for recreational activities such as swimming, fishing, and boating. The increase in nutrients to the receiving waters may result in additional algal growth.

**Resolution**: As stated in the EPA Findings for Issue 4, above, there are permit limits for Total Phosphorus and Total Nitrogen which are very low. TCEQ modelling/screening show that these nutrients will have a de minimis (i.e., less than noticeable) effect on the receiving stream. Contributions from non-point sources (i.e., run-off from bordering fields, etc.) may have a larger effect on nutrient additions to Onion Creek than the discharge from this facility. Additionally, individual septic systems (as discussed above) may have a much greater negative impact to Onion Creek than the discharge from this facility.

Issue 6: Tier 1 antidegradation requirements state that surface waters must be maintained in an aesthetically attractive condition, and require that waste discharges not cause substantial and persistent changes from ambient conditions of turbidity or color (30 TAC §307.4(b)(4) and 30 TAC §307.4(b)(5)). Please provide appropriate information showing that the draft permit will not cause or contribute excessive nutrients to the receiving waters that would violate the above listed requirements of a Tier 1 antidegradation review.

**Resolution**: As stated in Issues 4 and 5, above, the permit limits for Total Phosphorus and Total Nitrogen are very low. The treatment incorporates external carbon source addition and chemical (alum) addition for phosphorus removal. It is unlikely that the discharge from this facility will cause "substantial and persistent"

changes from ambient conditions of...color" in Onion Creek. Algal growth should be minimal due to the stringent limits of Total Phosphorus and Total Nitrogen.

With the significant amount of population growth in this area, EPA believes having a WWTF is necessary to maintain the high quality waters in Onion Creek. A large amount of the discharge from this facility will go towards beneficial reuse in the form of subsurface irrigation, so the actual amount of discharge from the facility will be much lower than what is permitted. Based on the information provided, EPA withdraws its objection to the issuance of TPDES Permit No. TX0136778 (WQ0014488003).

It should be noted that TCEQ and the City of Dripping Springs should continue to coordinate with the United States Fish and Wildlife Service (USFWS) and other stakeholders concerning Endangered Species Act (ESA) and other issues of concern.

Thank you for your cooperation in resolving the above issue. Should you have any questions concerning these comments, please contact me at (214) 665-7170, or have your staff contact Greg Valentine at (214) 665-3111, or by email at <a href="mailto:valentine.greg@epa.gov">valentine.greg@epa.gov</a>

Sincerely,

Stacey B. Dwyer, P.E.

Associate Director

NPDES Permits and TMDLs Branch

cc (electronic): Firoj Vahora., Municipal Permits Team Leader (MC-148)
Wastewater Permitting Section Division, TCEO

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